1. Introduction

Congratulations on your purchase of our 8/16-port dual-speed hubs. Migrating from traditional 10Mbps Ethernet to 100Mbps Fast Ethernet is now simple and affordable with these two dual-speed hubs. These high performance 8/16-port desktop 10/100Mbps dual-speed hubs are equipped with 8/16 RJ45 dual-speed ports and one uplink port.

Typically a dual-speed hub has two independent internal network segments: 10Mbps segment and 100Mbps segment. Depending on the speed of attached network devices, each individual port of a dual-speed hub provides Auto-Negotiation capability which automatically senses and selects optimum speed at 10Mbps or 100Mbps. A 10Mbps network device attached to the dual-speed hub will be able to communicate with other network devices attached to the hub running at 10Mbps. On the other hand, a 100Mbps network device attached to the dual-speed hub will be able to communicate with other devices attached to the hub running at 100Mbps. Therefore, dual-speed hub can be 10Base-T hub when all the connecting nodes are running at 10Mbps, or can be 100Base-TX hub when all the connecting nodes are running at 100Mbps. These 8/16-port dual-speed hubs are the ideal hubs for both 10Base-T and 100Base-TX networks. The internal switch automatically switches data traffic between devices running at different speed, which allows communications between ports running at 10Mbps and ports running at 100Mbps.

These 8/16-ports dual speed hubs' compact and slim design allows direct placing on the desktop or a small closet. They can also be conveniently mounted on the wall or the side of a desk to accommodate cabling consideration.

2. Features & Specifications

(1) Features

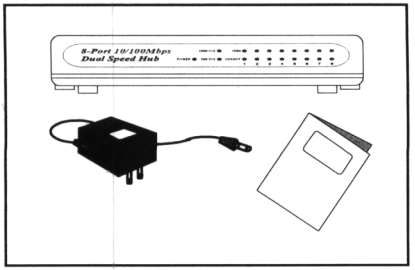
- Consists of one internal 10Mbps Ethernet segment and one internal 100Mbps Fast Ethernet segment.
- Supports eight/sixteen Auto-Negotiation RJ45 ports which automatically sense and select optimum speed and route data traffic to corresponding internal segments.
- Built-in Uplink port to connect with regular straight-through cable to another hub.
- Built-in internal switching function automatically switches data traffic between devices running at different speed establishes communications between ports running at 10Mbps and 100Mbps.
- Desktop size and wall mountable
- Limited Lifetime warranty

(2) Specifications

- Standards : IEEE 802.3 & 802.3u
- 10/100Mbps Ports : RJ45 x 8 (8 port) or RJ-45 x 16 (16 port)
- Hub LEDs : Power, 10M Collision, 100M Collision
- Port LEDs : 100Mbps, Link/Activity
- Dimensions : 7.4 x 3.9 x 1.0 in. / 187 x 99 x 26 mm (8 port)
  11.5 x 3.9 x 1.0 in. / 291 x 99 x 26 mm (16 port)
- Weight : 0.77 lb./350g (8 port),
  1.00 lb./450g (16 port)
- Power : External power adapter, 100~240V AC
- Operating Temperature : 32-131ºF (0-55ºC)
- Operating Humidity : 10-95% (Noncondensing)
- Emission : FCC Class B & CE

3. Package Contents

- One 8/16-port desktop Dual Speed Hub
- One external power adapter
- User's manual



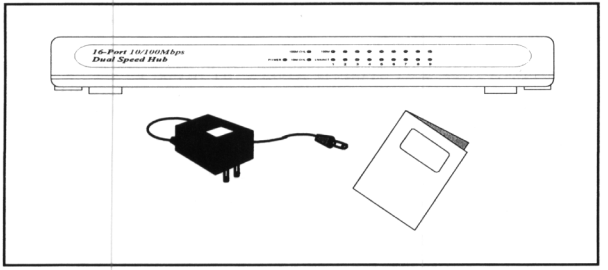


Figure 3-1 Package contents

4. Physical Description

(1) Panel

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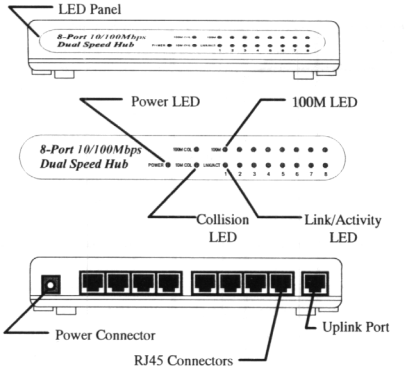

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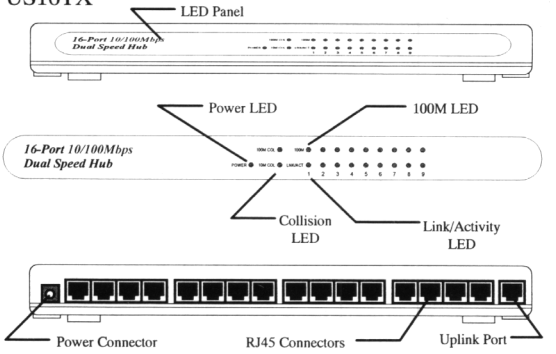

Figure 4-1 Panel description

(2) LED

LED	Color	Status	Description	Number of LED
PWR (Power)	Green	Lit	Power is supplied	One for the whole Hub
		Off	No power	
COL (Segment Collision)	Yellow	Lit	Collision detected in this segment	One for 10Mbps segment and one for 100Mbps segment
		Off	No Collision	
LNK/ACT (Link/Activity)	Green	Lit	A valid link is established	One for each port
		Flash	Data packets received	
		Off	No link is established	
100M (100Mbps)	Green	Lit	This port run at 100Mbps	One for each port
		Off	Not connected or run at 10M	

Table 4-1 LED description

5.Installation

1. Operating Environment

These 8/16-port dual speed hubs must be installed and operated within the limits of specified operating temperature and humidity (see previous section under Specifications). Do not place objects on top of the unit. Do not obstruct any vents at the sides of the unit. Do not position the hub near any heating source such as heater, radiator, or direct exposure to sun. Prevent entering of water and moisture into the unit. If necessary, use dehumidifier to reduce humidity.

2. Connecting to network devices

Connect one end of the network cable to any of the RJ45 ports on the rear panel, and connect the other end of the network cable to the RJ45 port of the network device. The network cables must comply with EIA/TIA 568 specifications and Category 5 standard for 100Mbps data rate or minimum Category 3 for 10Mbps data rate. Maximum length between the hub and any network devices is 100 meters (300ft). Once the network cable is connected on both ends and the attached network devices are powered on, the green Link Status LED should be lit. If the connected network devices are running at 100Mbps, the green Speed LED (100M) should also be lit.

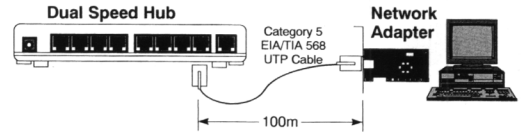

Figure 5-1 Connect the hub and network device

3. Uplink to Another Hub

Use the Uplink port (last port) to connect to another hub as illustrated below. Connecting cable must comply with EIA/TIA 568 specifications and Category 5 (100Mbps) standards to connect the hubs. The Uplink port of the Dual-Speed hub supports Auto-Sensing function which will automatically sense the speed of the connected hub and operates at either 100Mbps or 10Mbps speed. If the connected hub is another Dual-Speed hub or 100Base-TX hub, the transmission speed between the two hubs will be set at 100Mbps and the green Speed (100M) LED should be lit. The maximum length of the cable should not exceed 5 meters (15ft) when connecting two hubs running at 100Mbps and 100 meters (300ft) when connecting two hubs running at 10Mbps.

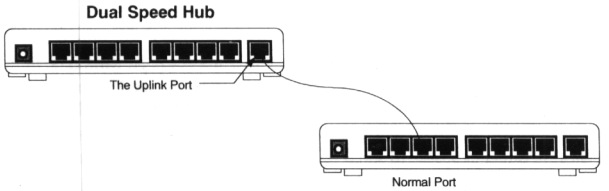

Figure 5-2 Uplink to another hub

4. Connecting the power

Connect the power cord to the power socket on the external switching power adapter. Connect the DC power jack to the DC power socket on the rear panel of the switch. Connect the power cord to the power outlet. The green Power LED on the front panel should be lit.

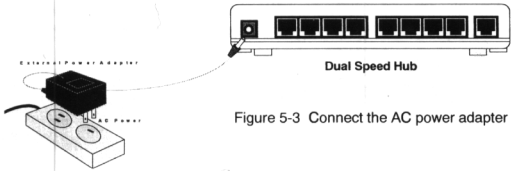

Figure 5-3 Connect the AC power adapter

6. Trouble-shooting

1. Power LED is not lit

- Check if the power cord is properly connected to the external power adapter and the power outlet. Make sure the DC power jack is firmly plugged into the power socket of the hub.

2. Link Status LED is not lit

- Check the power switch of the network devices attached to the hub; make sure they are turned ON.
- Check the network cables; make sure they are properly connected to the hub and the network devices.
- Check the network cables; make sure the cables comply with EIA/TIA 568 specification. Use straight-through Category 5 cables for 100Mbps connection and Category 3 or higher cables for 10Mbps connection.

3. 9th port's Link Status LED is not lit when it is uplinked to another hub

- Make sure the cable is connected to the uplink port.
- Check the network cable; make sure it is properly connected to both hubs. One end of the cable should be connected to last port while the other end of the cable should connected to a regular port. Do not connect the cable to both uplink ports.
- Check the network cable; make sure the cable complies with EIA/TIA 568 specification. Use CAT5 cables for 100Mbps connection and minimum CAT3 cables for 10Mbps connection.
- Check the network cable; make sure the maximum length does not exceed 5 meters (15ft) when this port is used for 100Mbps connection.

4. Collision LED flashes constantly

- Remove all the network cables; connect the cables back one by one to isolate the source of the collision.
- Check the network cable, inferior cable quality will result in excessive collision and error packets.

[!] Contact your dealer if problem persist.